

# **DEQ Nutrient Work Group 13th Meeting Summary June 16, 2011**

## **Introductions**

A list of the members of the Nutrient Work Group (NWG) and others in attendance is attached below as Appendix 1.

## **Agenda**

- Review of the November 18, 2010 Meeting Summary
- Senate Bill 367
- Planned DEQ Activities Leading to Board of Environmental Review Rule Package
- Nutrient Trading Policy
- NWG Work Plan
- Public Comment
- Meeting Schedules

## **Review of the November 18, 2010 Meeting Summary**

NWG members present at this meeting had no comments on the September 16 meeting summary.

## **Senate Bill 367**

George Mathieus and Richard Opper discussed SB367, which was enacted by the 2011 legislature, and issues involved in its implementation.

SB367 found that the treatment of wastewater to meet base numeric nutrient standards would result in substantial and widespread economic impacts on a statewide basis. The statute authorized three types of variances from the base standards, General, Individual and Alternative. The General Variance is available to permittees with wastewater treatment facilities that discharge to surface water and has three categories based on the discharge amount:

- If the discharge is equal or greater than 1 million gallons per day, it cannot exceed 1 milligram total phosphorus per liter and 10 milligrams total nitrogen per liter;
- If the amount discharged is less than 1 million gallons per day, it cannot exceed 2 milligrams total phosphorus per liter and 15 milligrams total nitrogen per liter; and
- If the discharge is from lagoons, the lagoon performance must be maintained at current levels.

A permittee may also seek an Individual Variance on a case-by-case basis if meeting the General Variance concentrations is still cost prohibitive, or an Alternative Variance if achieving nutrient concentrations established for an individual or general nutrient standards variance would result in an insignificant reduction of instream nutrient loading.

The categories and concentrations for General Variances found in SB367 variances must be established in Department rule by May 31, 2016, and must be revisited three years thereafter to determine if the category nitrogen and phosphorus concentration levels should be lowered

because more cost-effective and efficient treatment technologies are available. The variance period (regardless if it is General, Individual, or Alternative) is 20 years.

*Question - Has EPA provided feedback on SB367's determination of statewide substantial and widespread economic impacts?*

Answer - We are discussing this with EPA. We have been asked by EPA in a draft March 2011 letter to provide a demonstration of the state-wide substantial and widespread economic impacts that would occur if the base numeric nutrient standards were to be met today. A copy of this letter will be posted on the NWG web page. How to make the demonstration is clear for public waste water treatment plants but not for private, industrial plants. We are seeking a decision from EPA by the end of the summer.

Director Oppen has been in contact with EPA officials in Region 8 and Headquarters asking the agency to approve the variance approach in SB367 because it provides for immediate reductions in nutrient discharges that will improve water quality, for a review every three years to tighten the standards if removal technology and cost improves, and for the objective of meeting numeric nutrient base criteria that support designated beneficial uses within 20 years. Mr. Oppen will testify before Congress on June 24 in support of this position.

*Comment - Improving water quality requires more than regulating point sources. We need a concerted effort to address non-point sources.*

Response by Richard Oppen - While I agree that non-point sources need to be addressed, DEQ lacks the regulatory tools to do so, and the federal 319 Program funding in support of non-point improvements has been cut. Nutrient trading offers significant potential to reduce non-point sources. EPA is supportive of trading.

Response by George Mathieu - We are taking steps to address non-point sources. The reuse bill that passed during this legislature, nutrient trading, Total Maximum Daily Load (TMDL) development, and best management practices are examples of the steps we are taking. I am optimistic that we will see significant improvements regarding non-point sources over the next 15 to 20 years.

Response by Mike Supplee - It is untrue that controlling point sources is not helpful or effective. For example, during baseflow, point sources in various Montana rivers (Clark Fork, Yellowstone) are known to be a large proportion of the phosphorus load. Actions to reduce seasonal phosphorus discharges by point sources are improving water quality of large rivers. Predictions made in 1998 regarding the effect of controlling point sources on the Clark Fork are being realized. We are close to meeting nitrogen, phosphorus and algae criteria on the Clark Fork River below Missoula as a result of Missoula's 2005 sewage treatment plant upgrade and other actions upstream.

*Comment - The improvement below Missoula also resulted from hooking up residences that formerly relied on individual septic systems to the city sewage treatment plant.*

*Comment - We need to ensure that treatment dollars are spent fairly and equitably. If non-point sources continue to grow, we won't meet this objective.*

Response by Richard Oppen - Individual septic systems are the path of least resistance. Other states require septic permit fees, Montana does not. I considered legislation to address septic

but decided not to pursue a bill in this session. The political will to address this problem does not exist.

*Comment - Cost is not the sole issue in addressing septics. People live outside of cities by choice because of an array of service, tax and other concerns. Requiring annexation will not motivate people to hook up to sewers.*

*Comment - Waste water treatment plants and septic systems are both pathways for water pollution. Studies have not demonstrated how much septics contribute to water pollution.*

*Question - SB367 requires permittees to provide DEQ with the results of an optimization study and nutrient reduction analysis within 2 years of receiving a variance. Will permittees be required to provide a compliance plan every two years?*

Answer - DEQ needs the input of the NWG and EPA to work through the permitting and variance process. One approach may be to require one optimization study for existing infrastructure. If operational changes can provide low-cost improvements, we will want them implemented.

*Question - What does "low-cost improvement" mean? Will a cost threshold be needed?*

Answer - A threshold is not needed. The comprehensive review will identify appropriate operational changes.

*Comment - This process is meant to ratchet standard compliance. We need to understand what the level of ratcheting will be so people can plan, and we need sideboards on the ratcheting. We need to understand what the permitting and variance and review steps will be for the 20-year period.*

Response - DEQ understands this concern. We will need to take to the Board of Environmental Review (BER) a package of the proposed standards and the process for implementing them. We will work through the permitting scenario with you so that you understand and are comfortable with the rule package.

*Comment by Jeff Blend - We are reviewing internally the demonstration that EPA has requested for public waste water treatment. This demonstration will be simpler than examining each treatment plant. We need industry's assistance to develop the demonstration for the private sector. We will need actual engineering data for representative Montana industries.*

*Question - I asked at the September 2009 meeting if storm water permits will subject to the same nutrient permitting process as other permits. At that time, Jenny Chambers answered that DEQ expects that MS4, MDT, and CAFO permits will include nutrient considerations and that industrial storm water discharges are not expected to be significant sources of nutrients. Is this still true?*

Answer - Overall, yes it is. We expect individual industrial permitting to be subject to a best management practices approach.

*Question - After the initial 2016 rulemaking, will a BER rule be required in response to the 3-year review?*

Answer - The rule package will include implementation steps, and we know that our constituents will need to be comfortable with the package if it is to be adopted by the BER.

*Comment - To write facility plans, we need a definition of the 3-year review as soon as possible.*

Response - The worst case scenario will require complying with the 1 milligram total phosphorus per liter and 10 milligrams total nitrogen per liter concentrations at the discharge end of pipe.

*Question - You said that after the 2016 rule is adopted, the concentration levels may be revised if more cost effective and efficient technology becomes available. Who will decide what more cost effective means?*

Answer - While SB367 bought us some time, we still must answer this question.

*Question - Can the three flow categories in the general variance be changed in the 3-year review?*

Answer - The review cannot change the flow categories. They are established by the statute.

*Question - Must the review change the level of the concentrations for all three categories?*

Answer - No; it does not have to change all three.

## **Planned DEQ Activities Leading to Board of Environmental Review Rule Package**

Michael Suplee reviewed the actions DEQ needs to complete for the base numeric nutrient standards and targeted timelines. The technical actions include:

- Completion of model and report for Flathead Lake and large-river nutrient criteria; the target for the Yellowstone River is July 2011.
- Completion of wadeable stream criteria by August 2011.
- Definition of frequency and duration issues associated with criteria by August; the low flow criteria will likely be based on 14Q10, the low flow for a 14-day period which occurs once every 10years;
- Development of a non-degradation rule for nutrient standards by September 2011; for example, the quality of the lower Yellowstone River is better than the model-based numeric criteria we have developed, and the non-degradation rules will apply to it. Current rules lump nutrients with toxics. The nutrient rule may be more lenient initially than is the case for toxics, but it may then tighten regarding additional increments.
- Development of criteria considerations when a lake is in the watershed by September 2011.
- Presentation of the draft BER rule package to the NWG for its consideration in the October/November 2011 timeframe.

Technical reports relevant to these topics should be completed by the fall.

DEQ seeks input from the NWG regarding three major policy area topics:

- The process for the individual variance - We will review the previously developed public sector variance in light of EPA's sliding scale median household income (MHI) trigger and hopefully come to a final process. At this point DEQ does not plan on developing a private-sector individual variance procedure, based on our experience of the past two years. DEQ assumes that private-sector dischargers will work to meet the general variance categorical concentration limits

- Triggers/criteria for making changes to the general variance - We will discuss what might trigger changes to the concentration limits for the three flow categories.
- Insignificant loading exemption - We need to define when this exemption would apply (i.e., what is an insignificant load to a watershed?).

EPA will be reviewing the Yellowstone River model and wadeable stream criteria this summer.

*Comment - The League of Cities and Towns' consultant could assist in addressing the policy areas.*

*Question - Could you share the technical reports as you complete them so we don't have to try to review them all at once in the fall?*

Answer - Yes, I will email them as they are completed.

*Comment - We need the technical decisions for the funding cycle for smaller community facilities.*

## **Nutrient Trading Policy**

Mark Bostrom provided the update, beginning with a review of the history of DEQ's development of the policy. The department is in the process of revising the draft policy and will post the revision on the NWG web page for comment. No decision has been made about the length of the comment period. DEQ will review the policy with the NWG this fall and will include a proposed policy in the nutrient rule package to be presented to the BER.

## **NWG Work Plan**

DEQ will form two subcommittees of the NWG that will work over the summer. One will address the private sector variance demonstration of the state-wide substantial and widespread economic impacts of the base numeric nutrient criteria. The other sub-committee will consider the process, technical and policy issues, and implementation steps for the nutrient rule package. DEQ will schedule and post notification of the subcommittee meetings on the NWG web page. The work of the subcommittees will be presented to the full NWG at its September and October meetings. The NWG will consider the rule package at its November meeting. The NWG will consider the rule package at its November meeting. DEQ's goal is to send a rule package to the Water Pollution Advisory Council in January and the BER in February 2012 (if they meet then; the 2012 schedule is pending).

## **Public Comment**

There was no additional public comment.

## **Meeting Schedules**

Dates of the next three NWG meetings were set as follows: Thursday, September 29, Thursday, October 27, and Wednesday, November 30. All meetings will be in Helena at locations to be announced.

**Appendix 1  
NWG Attendance List  
June 16, 2011**

**Members**

Scott Murphy	Morrison-Maierly, Inc.
Dave Aune	Great West Engineering
John Rundquist	City of Helena - Montana League of Cities and Towns (MLCT)
John Wilson	City of Whitefish - MLCT
Dick Hoehne	Town of Philipsburg - MLCT
Brian Sugden	Plum Creek
Chris Brick	Clark Fork Coalition
Michael Perrodin	BNSF Railway
Ryan Swinney	Bruce Swinney & Associates

**Alternate Members**

Doug Parker	Hydrometrics (alternate for Debbie Shea)
Kate Miller	Montana Department of Commerce (alternate for Jim Edgcomb)
Jay Bodner	Montana Stockgrowers Association (alternate for John Youngberg)

**Non-Voting Members**

Dr. Mike Suplee	DEQ, Water Quality Standards Section, Water Quality Specialist
Dr. Jeff Bland	DEQ Economist

**Other Meeting Participants**

George Mathieus	DEQ Planning, Prevention and Assistance Division Administrator
Richard Oppen	DEQ Director
Mark Simonich	Helena Association of Realtors
Jenny Chambers	DEQ Water Protection Bureau Chief
Kristi Kline	Montana Rural Water Systems, Inc.
Jessie Luther	Browning, Kaleczyc, Berry, and Hoven
Tom Pick	USDA - NRCS
Gary Swanson	Robert Peccia & Associates
Claudia Massman	DEQ Attorney
Scott Schaefer	AE2S, Inc.
Judel Buls	AE2S, Inc.
Mark Bostrom	DEQ Water Quality Planning Bureau Chief
Amanda McInnis	HDR
David Mumford	City of Billings
Craig Pozega	Great West Engineering
Rosemary Rowe	EPA
Tina Laidlaw	EPA
Bob Bukantis	DEQ, Water Quality Planning, Water Quality Standards Section Supervisor
Paul LaVigne	DEQ Technical and Financial Assistance Bureau, Water Pollution Control Revolving Fund, Section Supervisor

**NWG Facilitator**

Gerald Mueller	Consensus Associates
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